

27. (Amended) The method of claim 23, wherein the method further includes the steps of:

monitoring synchronization signals (SYNC) from the camera; and
in accordance with the operating characteristics of the camera, triggering a lighting source during the camera vertical blanking interval so as to illuminate the material during image capture periods.

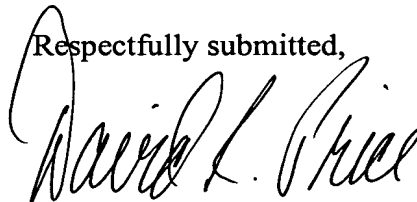
28. (Amended) The method of claim 23, wherein image capture is arranged to take place at time intervals which can be externally monitored by means of monitoring camera output SYNC signals and illumination of the web is provided at the appropriate moment around image capture and is triggered by the SYNC signals.

29. (Amended) The method of claim 23, wherein image data from the camera is analyzed so as to carry out a pattern recognition operation based upon the pattern recognition model to determine the physical position of the printed pattern repeat on the web in the field of view of the camera at the time of image capture.

REMARKS

The claims have been amended to remove multiple dependent claims and to conform to U.S. Patent Office practice. Please enter this amendment before calculating the filing fees.

Respectfully submitted,



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Version with markings to show changes made

In the Claims:

3. (Amended) The method of claim 1 [or 2], wherein the step of establishing offset is carried out whenever an image capture operation for capturing a desired image to be monitored is to be carried out.
4. (Amended) The method of claim 1, [2 or 3,] wherein setting the point of zero light intensity is achieved by closing the camera iris.
5. (Amended) The method of claim 1, [2 or 3,] wherein setting the point of zero light intensity is achieved by setting the camera to monitor a black image, or a black part of an image field of the camera.
6. (Amended) The method of [claims 1, 2 or 3] claim 1, wherein setting the point of zero light intensity is achieved by extrapolating from measurements obtained from two or more points of known reflectance somewhere in an image field of the camera.
8. (Amended) The method of claim 6 [or 7], wherein one point of known reflectance comprises a white reference tile within the image field.
9. (Amended) The method of [any of the preceding claims] claim 1, wherein there is provided a source of maximum light reflectance within the image field by ensuring that a white object is present somewhere in the image field.
10. (Amended) The method of [any of the preceding claims] claim 1, wherein restricting the camera to operate within the linear region is achieved by reducing the camera aperture by closing the iris to a predetermined degree such that the output voltage when measuring the source of maximum light intensity corresponds to a camera output voltage at or below the knee.

12. (Amended) The method of claim 10 [or 11], wherein restriction of the iris is arranged to ensure that a perfect white reflector registers at the top of the linear region and to then scale down to find appropriate values of camera output versus light intensity.

13. (Amended) The method of [any preceding claim] claim 1, wherein the step of establishing the knee is carried out less frequently than the step of establishing the offset.

15. (Amended) The method of claim 13 [or 14], wherein the step of establishing the knee is carried out after completing a plurality of print runs each comprising a plurality of image capture operations.

26. (Amended) A method according to claim 24 [or 25], wherein displacements of the pattern model in the longitudinal direction of the web are compensated for by delaying or speeding up a trigger signal fed to the camera, so as to perform an image capture operation relatively earlier or later according to a measured longitudinal displacement of the pattern recognition model relative to the captured training image.

27. (Amended) The method of claim 23, [24, or 25,] wherein the method further includes the steps of:

monitoring synchronization signals (SYNC) from the camera; and
in accordance with the operating characteristics of the camera, triggering a lighting source during the camera vertical blanking interval so as to illuminate the material during image capture periods.

28. (Amended) The method of [any of claims 23 to 25 and 27] claim 23, wherein image capture is arranged to take place at time intervals which can be externally monitored by means of monitoring camera output SYNC signals and illumination of the web is provided at the appropriate moment around image capture and is triggered by the SYNC signals.

29. (Amended) The method of [any of claims 23 to 28] claim 23, wherein image data from the camera is analyzed so as to carry out a pattern recognition operation based upon the pattern recognition model to determine the physical position of the printed pattern repeat on the web in the field of view of the camera at the time of image capture.